

EMPLOYEE CONTRIBUTION TO PROFITABILITY: A COMPARATIVE ANALYSIS OF PRIVATE AND PUBLIC SECTOR BANKS USING PANEL DATA

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Abstract

This study evaluates the contribution of employees to the overall profitability of selected public and private sector banks. The present study covers panel data of the last 12 years of top five banks in each category, ie., public sector banks and private sector banks. Interest income (II) and business per employee (BPE) are predicted to explain the dependent variable net profit per employee (NPPE). The results demonstrate that public sector bank staff are less motivated to turn business into higher interest revenue, which lowers NPPE. This implies that NPPE in public sector banks is influenced by variables other than interest income. It reveals management's lack of a sense of ownership and insufficient staff incentives to increase revenue through interest income which is a key explanatory factor for NPPE. In contrast, private sector banks exhibit stronger operational benefits, leading to higher NPPE despite lower BPE.

Keywords: Profitability, Net Interest Income, Net Profit Per Employee, Business Per Employee, Employee Contribution.

JEL Classification: P46; J24; J63; J81.

INTRODUCTION

India's thriving banking and financing sector contributes to the country's rapid economic growth. In economies that are now expanding, like India, the service sector has displaced the manufacturing sector. The adoption of a conservative financing strategy has made the Indian banking sector more adaptable and a major contributor to the development of the Indian economy. The banking sector is acting as a mediator, collecting surpluses from residents and channelling them to deficit sectors (Kainth & Agnihotri, 2012). The fierce competition between private and public sector banks has resulted in numerous facets of financial difficulty for India's exceptionally resilient banking industry. The Indian banking sector is rising swiftly and consistently, despite peculiar circumstances. The Indian Brand Equity Foundation (IBEF) reports that in 2022, the banking system's total assets—including public and private sector banks—will reach US\$2.67 trillion. The expanding significance of the Indian financial sector was investigated (Leeladhar, 2006). In this dynamic environment, banks are under great stress from deregulation, fierce competition, and rising demand. Banking operations have also become challenging due to the numerous regulations about BASEL-II, accounting standards, etc. that must be strictly and urgently followed.

With the country's overall prosperity, India's banking sector has experienced tremendous growth in recent years. The growth pattern of the industry is depicted in recent mergers, a rise



in the demand for green banking financial products, and other reforms in the banking sector. The addition of digital technology has significantly strained human resources. In the current environment, it is important to evaluate the performance of bank personnel and how it affects profitability. The human resources of any organisation are its backbone, which is otherwise known as the intellectual capital and internal stakeholders of the organisation.

It is widely believed in the banking sector that the private banking system places a greater emphasis on intellectual capital or human capital than the public sector banking system (Buallay, 2019; Mohammed, & Irbo, 2018; Hameed, & Anwar, 2018). According to earlier studies, private-sector banks have more productivity or business per employee than publicsector banks (Leblebici, 2012; Gopinath, 2008: Sathye, 2005). However, in certain nations, the private banking system's excessive control of employees leads to stress, which in turn leads to poor profit performance (Sathye, 2005). The present study is more concerned with determining whether private and public sector banks have established a work culture that motivates employees in this competitive banking environment to produce better business following the global economic crisis of 2008. It is imperative to testify the work culture of public and private sector banks on account of differing opinions on the performance of banks about business per employee, which is a proxy for the quality of human capital in generating business. Although intellectual capital and human capital are the focus of the investigation of bank performance (Sievers et al., 2013; Zéghal, & Maaloul, 2011; Barathi Kamath, 2007; Mohammed, & Irbo, 2018; Hameed, & Anwar, 2018; Leblebici, 2012; Gopinath, 2008; Sathye, 2005), hardly any researcher has considered the business per employee as a variable to measure banking performance.

Being a service industry, the banking business relies heavily on the skills and resources of its people. Employees require knowledge that is based on their abilities, competence, and motivation to do their duties, as human resources are crucial to the growth of the firm (Syed, 2009). The current study aims to pinpoint the financial factors that account for workers' profitability contributions to Indian commercial banks. The top five banks in each category of the public and private sectors are selected based on market capitalisation for study.

The present study is important for bank management as it measures the profit per employee for the banks that operate under different organisational cultures, and the organisation culture is dynamic too. The present research also made incremental contributions to the existing literature and provided policymakers with insight into the impact of management structure on employee productivity.

RELEVANT LITERATURE

For financial institutions, bank profitability is a critical component that depends on several variables. Net interest income produced per employee and business per employee are two important variables that might affect bank profitability. These variables are largely affected by a firm's investment in intellectual capital. The present study investigates the effects of these variables on per-employee banks' profitability.

Indian Banking Sector

Commercial banks in India own more than 60 percent of the total assets of India's financial system, which includes banks, insurance companies, non-banking financial companies, cooperatives, mutual funds, and other smaller financial entities. The banking sector was growing rapidly until the global financial crisis. Chaudhary and Sharma (2011) discussed the impact of economic reforms implemented in India beginning in the early 1990s. Researchers



examined the impact of 1990s banking liberalisation, globalisation, and privatisation policies on the efficiency and profitability of public and private sector banks. (Joshi & Bhalerao,2011) used data envelopment analysis (DEA) to assess the technical efficiency of Indian commercial banks. Researchers have further examined the impact of numerous market and regulatory initiatives on the efficiency and profitability of commercial banks in India (Dwivedi and Charyulu, 2011).

Challenges For Banks in India

Role of Intellectual Capital and Efficiency of Banks

Currently, India's banking sector has faced numerous challenges because the government's primary goal is to consider its human resources as valuable assets. Banks need to focus more on investment in employee training programs and development to meet their expectations. Intellectual capital efficiency translates into bank profitability. As a result, the role of intellectual assets cannot be overlooked. It is as important as any organisation's other physical assets. To gain a competitive advantage, the banking industry must place a greater emphasis on intellectual capital (Nawaz and Haniffa, 2017; Rouf and Hossain, 2018).

Many studies are being conducted to identify the factors that satisfy and motivate employees to contribute to profitability. Calvin (2017) discovered a strong positive correlation between employee expenses and performance. According to researchers, the amount spent by banks on employee development keeps them motivated. Studies have shown that providing financial perks encourages employees to perform (Nzyoka&Orwa, 2016; Calvin,2017; and Yamoah,2013).

It becomes crucial to demonstrate the connection between the firm's intellectual capital investments and its success over the long term. For scale improvement in the banking business, banks search for mergers and acquisitions, banks consolidation, etc. (Patel, 2019; Shleifer and Vishny 1997). Due to a cultural shift, these mergers and consolidations in the banking sector typically cause stress and affect bank staff productivity. The non-performing assets of the weaker bank are relatively higher during the merger process, and the weaker bank is acquired by a stronger bank. The stronger bank typically forces technological integration on the weaker bank, which causes the acquired bank to undergo a technological transition, leading to resistance to change and employee layoffs (Balasubramanian, 2022).

Recent mergers and acquisitions, increased customer expectations, financial fraud, mounting non-performing assets, rising consumer demands, and government initiatives like the Pradhan Mantri Jan Dhan Yojana have all put a substantial burden on personnel in the banking sector (Ranajee, 2018; Goyal et al., 2019; Singh et al., 2019). Meles, et al. (2016) found that efficiency in the use of intellectual capital (IC) positively affected the financial performance of US banks.

Profitability of Indian Commercial Banks

There are numerous factors that directly or indirectly affect bank profitability. According to Brahmaiah (2018), both internal and external factors, such as the strength of equity capital, operational efficiency, and deposit ratios, have a considerable beneficial impact on bank profitability in India. Several factors, including credit risk, the cost of financing, the ratio of non-performing assets (NPAs), and CPI inflation, significantly reduce bank profitability. Profit per employee, net interest margin, NPA ratio, and non-interest income significantly affect the bank's profitability (Maiti & Jana 2017).



Business Per Employee's Effect on Bank Profitability

Business per employee and bank profitability have a positive link, according to a European Central Bank (ECB) analysis of European banks (De Haan & Vlahu, 2016). Similar to this, an IMF study found that the number of employees has a big influence on a bank's profitability (Claessens et al., 2001). The study found that banks with more employees were more likely to generate more money and, therefore, be more profitable.

Net Interest Income Per Employee's Effect on Bank's Profitability

Another critical element that might affect bank profitability per employee is net interest income (NII). The Reserve Bank of India (RBI) established a link between net interest income per employee and bank profitability in research performed on Indian banks (Misra, 2015; Slam & R. M., 2018). According to the analysis, banks with larger NIIs per employee are probably more profitable.

Similar to this, a World Bank investigation into African banks discovered a link between net interest income (NII) and bank profitability (Demirgüç-Kunt, & Huizinga, 1999). According to the study, banks with a higher NII are probably more profitable.

The business per employee, the profit per employee, and the net interest per employee are the measures of the operational efficiency of any bank (Zafar & Khalid, 2012; Sharma, 2013; Ashokan & Menon, 2016). Kumar & Sreeramulu, (2007) evaluated, from 1997 to 2008, the personnel productivity and expense ratio trends between traditional and modern banks. They concluded that the performance of the foreign bank and new private sector banks was significantly better than that of the traditional banks (public sector and old private sector banks).

RESEARCH METHODS

Panel data models look at time series (time) and cross-sectional (group) effects. These effects could be random or predetermined. Fixed effects argue that each group and time have a distinct intercept in the regression equation, whereas random effects argue that each group and time have a distinct disturbance.

In a fixed effects model, any connection between the unseen variables and the observed variables is acceptable. Unobserved variables are assumed be statistically to independent of and uncorrelated with all observable variables in a random effects model. Instead of comparing differences in values at specific levels, random effects can be viewed as predictor factors where the value distribution (i.e., the variance among the values of the response at different levels) is considered.RE models can be estimated using Generalized Least Squares (GLS). The effects of time-invariant variables with time-invariant effects are either fully or partially taken into account in fixed effects models. Some of the specific models that can be used when the type of effects (group versus time) and property of effects (fixed versus random) are combined are the fixed group effect model (one-way), fixed time effect model (one-way), fixed group and time effect model (two-way), random group effect model (oneway), random time effect model (one-way), and random group and time effect model (twoway).

The two-way model is avoided on account small number of observations in the present research. Furthermore, imposing both fixed and random effects on a group or time variable is theoretically impossible. A fixed group effect and a random group effect, for example, cannot coexist. Two effects of imposing a group or time contradict each other conceptually. However,



by combining a least squares dummy variable (LSDV) model and a random effect model, a model with a fixed group effect and a random temporal effect can be fitted (or vice versa). Because of the lack of parsimony and degrees of freedom, this paradigm is conceivable but not recommended.

To identify our model, we must run the appropriate tests, including the F test for the fixed effect model and the Breusch-Pagan Lagrange Multiplier (LM) test. The Hausman test is required if both fixed and random effects are discovered. After we have completed the F and LM tests, we can use the information in Table 1 to select our model.

Fixed Effect F-test / Wald test	Random Effect BPLM test	Model Selection		
H0 is not rejected (No fixed effect)	H0 is not rejected (No random effect)	Pooled OLS		
H0 is rejected (fixed effect)	H0 is not rejected (No random effect)	Fixed effect model		
H0 is not rejected (No fixed effect)	H0 is rejected (random effect)	Random effect model		
H0is rejected	H0 is rejected	(1) Fixed and random effect model ¹ or		
(fixed effect)	(random effect)	(2) select one of the two depending on the result of Hausman test (recommended direction).		

Table 1: Model Selection Criteria

The top five banks in both the private sector and public sector are considered in this study based on their market capitalization. In this study, the dependent variable net profit per employee (NPPE) is expected to be explained by interest income (II) and business per employee (BPE) of the selected banks for 12 years i.e. from 2011 to 2022.

BPE refers to the bank's gross revenue, which includes both interest income and non-interest income earned per employee, and is a measure of how well management employs human resources to produce earnings. NPPE is calculated as the net profit on the total number of employees, whereas the interest income earned is from deposits and loans.

As a result, the general ordinary regression model is extended to a panel regression model with banks as the cross-sectional variable and NPPE, Interest Income, and Business per employee data as the time series variable. We describe our hypothesis as follows, based on the existing literature and the expected relationship postulated in the preceding paragraphs.

H1: Net profit per employee (NPPE) is positively related to interest income (II) and business per employee (BPE)..

To test this hypothesis, we run the following panel regression.

The general panel regression model equation is expressed as

$$Y_{it} = \alpha_i + \beta_i X_{it} + \dots + U_{it}$$

Where α is constant;

 β_i = coefficients of determinants of Yi;

- i (bank's identity) = 1, 2...5;
- t (time-interval) = 1, 2.... 12;

Uit is error term



In this study, a comparison is made for the above hypothesis for the two sets of data, which are private banks (PBs) and the public sector banks (PSBs).

RESULTS AND DISCUSSION

Below mentioned table 2 is presenting the test findings.

	Pub	lic Sector Ba	ank	Private Sector Bank			
	BPE	п	NPPE	BPE	II	NPPE	
Mean	165,000,000	7,750,538	274,276	117,355,538.30	6,237,370.51	1,203,942.49	
Median	166,000,000	7,983,856	484,784.40	115,332,723.81	5,745,157.03	1,174,192.97	
Maximum	278,000,000	11,277,678	1,296,867	206,813,042.29	9,777,079.90	2,610,652.37	
Minimum	75,836,788	3,651,068	-1,639,962	53,263,886.64	3,808,865.45	46,244.39	
Std. Dev.	40,279,197	1,473,927	648,217.80	39,642,441.27	1,551,787.76	510,119.61	
Skewness	0.17	-0.35	-1.19	0.42	0.35	0.67	
Kurtosis	3.02	3.34	3.98	2.15	2.23	3.82	
Observations	60	60	60	60	60	60	

 Table 2: Descriptive Statistics for samples of Public & Private banks

Source: Authors Calculation using E-views.

According to the descriptive analysis, public sector banks (PSBs) have 40 percent more business per employee as compared to private sector banks. In all cases, the BPE is higher to the mean or the median for Public sector banks. The summary statistics of NPPE are expected to be better for PSBs based on the BPE statistics.

The reality, however, is quite opposite. The average Net Profit per employee (NPPE) of private banks is approximately four times that of PSBs. The median, maximum, and minimum NPPE of private sector banks is also roughly twice that of PSBs. Similarly, the mean and median interest income of PSBs is also calculated.

Similarly, the mean and median interest income of PSBs is 25% and 35% higher than that of private banks, respectively. The PSBs and private banks have NPPE to BPE ratios of 0.166% and 1.026%, respectively. This demonstrates the operational advantage of private banks in converting a lower BPE to a higher NPPE, with a conversion rate of more than six times.

The correlation coefficient in table-2 shows that for the PSBs, there is no correlation between NPPE and BPE and NPPE and Interest Income (II), whereas interest income and BPE are strongly correlated. In the case of private banks, there is no correlation between NPPE and II, but there is a weak correlation between NPPE and BPE and BPE and II.

	Public	c Sector Bar	nks	Private Sector Banks				
	NPPE	II	BPE	NPPE II				
NPPE	1			1				
II	-0.07735	1		-0.057444	1			
BPE	-0.03376	0.89804	1	0.456524	0.332707	1		

Table 3: Correlation between the variables

Source: Authors Calculation using E-views.

To examine the impact of bank type and the unexplained factors captured by the time factor, a panel analysis is performed on the two types of bank data separately, with the following model specification and research hypothesis.





Model Specifications

The bank's net profit per employee (NPPE) is calculated using the following model, which is stated explicitly, about its business per employee (BPE) and interest income (II).

NPPE =
$$C(1) + C(2)*II + C(3)*BPE$$

where, C(1) is the Intercept, C(2) and C(3) are Coefficients to be estimated for II and BPE.

Research Hypotheses

The null form of the hypotheses formulated for this study is stated as follows:

First H0: The change in the bank's Net Profit per Employee (NPPE) is unrelated to the changes in the bank's Interest Income (II) and Business per Employee (BPE)

Second H0: The NPPE is unaffected by the ownership structure of bank management.

Private Sector Banks

		Value	df	Probability
Wold Test Statistic	F-statistic	2.430305	(4, 53)	0.0589
wald Test Statistic	Chi-square	9.721221	4	0.0454
		Cross-section	Period	Both
Breusch-Pagan	Null (no rand. Effect)	One-sided	One-sided	Both
Lagrange	Breusch-Pagan	2.727273	0.056826	2.784099
multiplier (BPLM)		(0.0986)	(0.8116)	(0.0952)
Hausman Test	Hausman Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Summary	Cross-section random	6.451467	2	0.0397

Table 4: Model Selection Criteria of Private Banks

Source: Authors Calculation using E-views.

Following Wald's test, the H0 assumption that there is no fixed effect from the cross-section observation is rejected. As a result, Wald's test confirms that the OLS model and the random effect are inappropriate. The FEM is recommended by the test for estimating NPPE based on II and BPE. The Breusch-Pagan Lagrange multiplier (BPLM) test for panel data also indicates that no random effect exists because H0 is not rejected. The p-value for the one-sided cross-section is greater than 0.05, indicating that H0 should not be rejected at the 5% significance level.

The Hausman test is also used to determine whether the random effect model or the fixed effect model for cross-section observations should be confirmed. For cross-section data, the Hausman test assumes the null hypothesis that random effect is preferred over fixed effect. If the test statistics are significant at the 5% level of significance, the null hypothesis should be rejected, and the test should be carried out using fixed effect models.

The p-value of the chi-square statistics in the preceding table is 0.0397, and we conclude that random effect is not preferred over fixed effect for cross-section data. In the case of private sector banks, all three tests confirm the fixed effect model for cross-section observations. We can also confirm this from the model output by using the following criteria.

- 1) The adjusted R-square should be the greatest.
- 2) The regression standard error should be kept to a minimum.
- 3) The Schwarz criterion value should be as low as possible.

The Schwarz criterion value is chosen from the three previously mentioned criteria to evaluate the various possible models to identify the best fit of the various models. A simple OLS regression with no cross-sectional or time element factors is used to test the hypothesis that there is no effect of different cross-sections on intercept, implying that panel OLS is more appropriate than FEM and REM.

To see the impact of business per employee (BPE) and interest income (II) on net profit per employee, we must disregard the specific period and bank in this study (NPPE). The Pooled OLS method is used to calculate a common constant for all cross-sections in a simple OLS regression approach (common constants for banks). Under the assumption that the data set is homogeneous, the common constant approach is advantageous because it practically indicates that there are no differences between the calculated cross-sections.

Return Per Employee	OLS	Prob	FE Period	Prob	FE Cross-Section	Prob	FE Cross-Section & Time	Prob
Constant (C)	878,908.6	0.001	1,202,399	0.0001	373,860.9	0.295	869,778.5	0.10
II	-0.077	0.057	-0.119995	0.0066	0.017	0.749	-0.048	0.50
BPE	0.007	0.000	0.006391	0.0002	0.006	0.001	0.005	0.01
R-squared	0.258		0.450039		0.373		0.520	
Adjusted R-squared	0.232		0.294615		0.327		0.326	
S.E. of regression	447150.100		428435.2		426268.700		418889.300	
Sum squared residual	11,400,000,000,000		8,440,000,000,000		9,630,000,000,000		7,370,000,000,000	
Log likelihood	-864.237		-855.2389		-859.184		-851.158	
F-statistic	9.894		2.895559		5.249		2.676	
Prob(F-statistic)	0.000		0.003923		0.000		0.005	
Mean dependent var	1,203,942		1,203,942		1,203,942		1,203,942	
S.D. dependent var	510,119.6		510,119.6		510,119.6		510,119.6	
Akaike info criterion	28.908		28.975		28.873		28.972	
Schwarz criterion	29.131		29.46331		29.117		29.600	
Hannan-Quinn criterion.	28.949		29.16578		28.968		29.218	
Durbin-Watson stat	0.6294		0.6653		0.6646		0.7025	

Table 5: Results of the Net Profit per Employee Model

Source: Authors Calculation using E-views.

In its simplest form with a common constant, in specific, the general panel regression model becomes

NPPE =
$$C(1) + C(2)*II + C(3)*BPE$$

As all the coefficients are found to be significant at 5% level of significance, the equation for estimating the NNPE becomes NPPE = 878,908.5917 - 0.077379843 * II + 0.00688234 * BPE

The three possible FEM equations were calculated after the Wald and Hausman tests confirmed Fixed Effect Model with both time period and cross section observations are the options. The results show that all explanatory variables, including the intercept, are significant at the 5% level for the FEM (time period) effect. Only in the FEM cross-section and FEM Cross-section & Time models is BPE a significant explanatory variable influencing NPPE.

In specific, our general panel regression model with FEM Time period for NPPE becomes

NPPE = 1,202,399- 0.119995 * II + 0.006391 * BPE

In specific, our general panel regression model with FEM Cross-section for NPPE becomes

NPPE = 373,860.9 + 0.006*BPE



In specific, our general panel regression model with FEM Cross-section & Time for NPPE becomes

NPPE = 869,778.5 + 0.005*BPE

As per the minimum Schwarz criterion, the fixed effect cross-section model is confirmed.

Public Sector Banks

To determine whether the random effect model or the fixed effect model will be used, we will perform the Hausman test, which assumes the null hypothesis that random effect is preferred over fixed effect for cross-section data. If the test statistics are significant at the 5% level of significance, we will reject the null hypothesis and proceed with fixed effect models.

		Value	df	Probability
Wold Test Statistic	F-statistic	1.290481	(4,53)	0.2855
walu Test Statistic	Chi-square	5.576340	4	0.2331
Prousab Dagan		Cross-section	Period	Both
Lagrange multiplier	Null (no rand. Effect)	One-sided	One-sided	Both
	Breusch-Pagan / Honda	-0.010120	5.907795	4.170286
(DI LIM)	Prob.	0.5040	0.0000	0.0000
Hausman Test	Alternative	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Summary	Cross-section random	1.300223	2	0.522

Table 6: Model Selection Criteria of Public Sector Banks (PSBs)

Source: Authors Calculation using E-views.

The null hypothesis of the Redundant Fixed Effects Test states that simple OLS estimation is preferable to a fixed effect model under the assumption that the individual effect (C0) in the model does not correlate with the explanatory variables.

Because the p-value for the cross-section chi-square statistics is greater than 0.05, we accept the H0 and confirm that the fixed effect model is not appropriate for the cross-section units. Hausman test statistics are used to see if there is a link between the unique errors and the model's regressors.

According to the null hypothesis, there is no relationship between the two. We accept the H0 and continue with the random effect models for the cross-section data because the p-value of the Hausman test statistics (Chi-Sq. Statistic) is greater than 0.05. All three tests in the model selection criterion table confirm that the fixed effect is not appropriate for the PSBs dataset. The Hausman test confirms that the random effect model is better suited to the PSBs dataset.

Table 7: Random Effect Model (REM) for Cross-sections for PSBs

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	682,540.9	488,657.9	1.396767	0.1679
II	-0.10492	0.136692	-0.76753	0.4459
BPE	0.002454	0.005006	0.490198	0.6259

Source: Authors Calculation using E-views.

The random effect model for the cross-section observation reveals that no single explanatory variable significantly explains the NPPE. The insignificance may be since in the REM, each bank or cross-section observation has a different intercept due to sampling, despite the fact that the banks are among the top five PSBs in terms of size.



However, in the case of private banks, BPE is the significant estimator of NPPE, despite the fact that the intercept was also found to be insignificant. C(1) + C(2)*II + C(3)*NPPE = C(1) + C(2)*II + C(3)*BPE could not be created specifically for PSBs.

Return per	OL S		FE Cross-		RE Cross-		RE Cross-	
employee	OLS	ргов	section	ргор	section	prop	&FE Time	ргор
Constant (C)	612817.2	0.1998	817941.9	0.1192	682540.9	0.1679	-1177108	0.0114
Π	-0.10689	0.42	-0.09901	0.5115	-0.10492	0.4459	0.11451	0.3799
BPE	0.002969	0.5399	0.001356	0.8061	0.002454	0.6259	0.003418	0.5252
R-squared	0.01257		0.100205		0.014098		0.767414	
Adjusted R- squared	-0.02208		-0.00166		-0.0205		0.701683	
S.E. of regression	655334		648755		644760.4		342101.3	
F-statistic	0.362808		0.983722		0.40753		11.67509	
Prob(F-statistic)	0.697315		0.445621		0.667214		0	
Mean dependent var	274276		274276		216399.7		274276	
S.D. dependent var	648217.8		648217.8		638253		626347.9	
Akaike info criterion	29.67238		29.71278					
Schwarz criterion	29.7771		29.95712					
Hannan-Quinn criterion.	29.71335		29.80835					
Durbin-Watson stat	0.995228		1.113377		1.03446		1.61067	

 Table 8: Results of the NPPE model of PSBs

Source: Authors Calculation using E-views.

We still run the simple OLS regression without taking into account any cross-sectional or time element factors, Fixed effect model (FEM) of cross-section observation, FEM for both cross-section and time effect, REM of cross-section observation, and REM cross-section with FEM time period to see if there is any other possibility for a significant contribution. As shown in table-6, none of the models made a significant contribution. It implies that for the PSBs, other factors may influence the NPPE. The management does not foster a sense of ownership or incentivize employee performance in order to generate more business. Because the NPPE of PSBs is lower than that of private banks, one can argue that cost cutting does not affect the morale of PSB employees.

CONCLUSION

According to the current study, Public sector bank employees are not very motivated to convert BPE into more interest income, resulting in a lower net profit per employee. The results show that because of the government's stake in PSBs, banks can attract a large number of customers, resulting in higher business per employee. Banks, on the other hand, fail to manage and retain customers due to a lack of technological advancement, ownership structure, a lack of staff, corrupt practices, and other operational challenges. While the results show that private sector banks have more operational advantages than PSBs, this results in higher NPPE despite lower BPE. The results of the present study are consistent with Yadav & Garima, (2015).

So concerning the results, we conclude that employees of private sector banks are under immense pressure to perform. Credit collection departments are strong at private sector banks. Banks offer more lucrative products that entice customers. Thus, PSBs must focus on motivating employees and developing more innovative financial products, as well as providing more generous customer service to retain customers. The current study will be more beneficial to researchers and bankers It explains the reasons for mounting non-performing assets in the public sector banks and where the banks need to divert their efforts. In the future, researchers can look into the qualitative factors responsible for the underperformance of the public sector.

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